

#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Rozman on 4/21/2010.

The application has been amended as follows:

Change claim 6 lines 8-9 to:

shifting a bit value of 0 into the first significant bit of the tag stack register and shifting all bits of the tag stack register in the first direction, in conjunction with creation of a non-reference operand; and

#### **REASONS FOR ALLOWANCE**

2. The following is an examiner's statement of reasons for allowance:

3. Applicant argues "Claim 1 further describes that this movable bit position for the stack pointer corresponds to a number of operand tags stored in the tag stack register, and that a first significant bit of the tag stack register having a predetermined value serves as the stack pointer. None of the art anywhere teaches or suggests this subject matter of claim 1. As discussed above, Ramesh simply teaches that a stack pointer (which has nothing to do with the recited tag stack register) refers to a top of a register stack. The secondary reference Tran is also silent in this regard. Still further, the

additional secondary reference Adl-Tabatabai only teaches the presence of a bit vector that can indicate a reference type of a corresponding variable. Nonetheless, nothing here anywhere teaches or suggests that a given significant bit of this bit vector have a particular value to serve as a stack pointer. Instead, each bit of the bit vector only indicates whether a variable is a reference or non-reference type. For all of these reasons, claim 1 and the claims depending therefrom are patentable over the cited art. For at least similar reasons, independent claims 6, 12, and 17 and their dependent claims are similarly patentable."

The examiner agrees for the following reasons. The combination of Ramesh and Tran disclosed that an implicit stack pointer can be made keeping the stack pointer pointing to a constant placement within the tag register. The combination of Ramesh and Adl-Tabatabai disclosed shifting values into the tag register for reference and non-reference type operands. Both combinations failed to teach that the stack pointer is a predetermined value in the tag stack register that can be updated by movement of the predetermined value. Claims 6, 12, and 17 have claim limitations that are similar, but are narrower in scope by more narrowly defining the predetermined value. Thus, the claims are considered allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

The following is text cited from 37 CFR 1.111(c): In amending in reply to a rejection of claims in an application or patent under reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. The applicant or patent owner must also show how the amendments avoid such references or objections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Petranek whose telephone number is 571-272-5988. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie Chan can be reached on (571) 272-4162. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jacob Petranek/  
Examiner, Art Unit 2183